

CONFIDENTIAL

50X1-HUM

equipment to mix the various types of Vares ore to attain as consistent a chemical content as possible. At the same time, an installation for sintering ore, especially siderite, is being constructed to eliminate harmful sulfur, obtain richer ore for blast furnaces, and make it possible to produce pig iron economically.

Intensive and speedy exploration of little known deposits in Samoborska Gora near Beslinac, deposits at the foot of Velebit Mountain, etc., should be begun.

Numerous other small deposits of iron ore in Bosnia-Hercegovina need to be fully explored for the production of gray pig iron.(3)

Large deposits of iron ore have been discovered in Serbia, but as yet have not been fully explored. Primary deposits, which extend from Belgrade to the Zapadna Morava River, average about 40 percent iron. Secondary deposits, located in the Kopaonik area, are estimated at 150 million tons. Still other deposits are located in northeastern Serbia in the Majdanpek, Rudna Glava, and Crnjacka areas, and in Kosovo-Metohija.(1)

It is known that Yugoslavia can exploit the limonite from Majdanpek and the magnetite from Rudna Glava for the production of gray pig iron, because they contain relatively little manganese. Many of Serbia's known deposits contain large quantities of chromium and nickel which decrease the deposits' value, because there is no process known for eliminating these undesirable elements in the production of pig iron.(3)

In Macedonia, large iron ore deposits have been located west of Prilep.(1) Although exploratory work is still in progress, it is already possible to affirm that Macedonia has sufficient iron ore to make possible an increase of ferrous metallurgical production in the near future. This ore contains 35-42 percent iron, but contains large quantities of phosphorus. Therefore, research is being done at the Metallurgical Institute to determine the best technological method for processing this ore.(3)

In Croatia, iron ore deposits are located in Petrova Gora and Trgovska Gora.(12) Traces of iron ore have been found in Slovenia and Montenegro.

In addition to deposits described above, Yugoslavia has considerable reserves of pyrites. In processing pyrites for sulfuric acid, residues containing 60 percent iron are obtained. At the Trepcia mine, pyrites containing considerable quantities of iron are obtained when processing lead and zinc ores. Yugoslavia also has enormous quantities of bauxite; when processed into aluminum, residues containing over 25 percent iron are obtained.

Manganese

Manganese deposits extend across the entire country from the northwest to the southeast in the diabasic-hornblende rock zone. Large deposits are located in Kozara near Cevljanovici, in the Lim River valley, in Raska, and in the Kicevo area in Macedonia. The best explored deposits are in Cevljanovici and Kicevo. Confirmed reserves indicate that Yugoslavia can supply manganese for its ferrous metallurgical needs. Considerable quantities of manganese will be derived as by-products in the production of pig iron.

Chromium

Yugoslavia is richer in chromium deposits than any other country in Europe. The chromium content of Yugoslav ores is fairly high, 42-50 percent. Yugoslav reserves of chromium are estimated at 1.5 million tons.(1) The largest chromium deposits are located in Macedonia, in Radusa at the foot of Sar Planina, at the foot of Skopska Crna Gora, and at Valandovo.(2) Deposits are located in the

- 2 -

CONFIDENTIAL

50X1-HUM

CONFIDENTIAL

Krivaja River valley in Bosnia. In Serbia, numerous small deposits are located in Valjevo, Cacak, and Raska, and in Kosovo-Metohija, in the area around Uro-sevac, Prizren, and Djakovica, especially between Kacanik and the Albanian border.

Molybdenum

Reserves of over 100 million tons of molybdenum have been confirmed in Surdulica, near Mackatica. Molybdenum appears in Pcinja and Unjilane srezes in Serbia, and in Crnjka and Tenda. In Slovenia, at Mezice, molybdenum is also derived as a by-product from lead and zinc ore.

Nickel

The best known deposits of nickel ores are located in Serbia at Ba, Kadina Luka, and Stragari. Exploration is still in progress, and total reserves are estimated to be in the hundreds of thousands of tons. Nickel is also found around the Studenica and Gokcanica rivers, tributaries of the Ibar River. In addition, 0.3-1.5 percent of nickel is found in magnesite ore veins which are quite widespread in Yugoslavia.

Cobalt

Cobalt is located in the Gokcanica River valley, Rudnik, and Kopaonik.

Wolfram

Deposits of wolfram were discovered in 1949 in eastern Serbia.(1)

Metallurgical Plants

Yugoslavia's largest smelters of pig iron are located in Vares, Zenica, Jesenice, and Sisak. Steel is produced in large steel mills in Zenica and Jesenice, and in smaller mills in Gustanj, Store, Kamnik, Sibenik, and Smederevo.(2)

Zenica, including the Vares Mine, is Yugoslavia's one complete ferrous metallurgical combine (1): The Zenica Ironworks produces crude Siemens-Martin steel; electrical steel; steel castings; rolled steel, which includes steel bars, structural shapes, heavy and light supports, concrete steel, railroad rails, industrial rails, and railroad equipment; and forged steel, which includes steel nails and machinery and construction parts.(4) The Zenica Ironworks is building a large blooming mill to produce massive structural shapes and is completing a coke plant which will produce 400,000 tons of metallurgical fuel by mixing central Bosnian brown coal with lignite. A second coke plant is under construction in Lukavac near Tuzla. By utilizing lignite from the Kreka mine, the plant will produce 200,000 tons of coke for the Sisak and Jesenice plants.

Sisak is being transformed into a large iron and steel combine; besides blast furnaces, the Sisak Combine is obtaining a steel mill, a modern forge, and seamless tube rolling mill.(1) The Sisak Ironworks produces gray pig iron, white pig iron, silicon iron, slags, (5) gray iron castings, and special castings for the cement industry.(6)

In Jesenice, a new rolling mill is being built to produce metal plates for use in ship construction.(1) The Jesenice Ironworks produces semifinished and finished steel products of the highest quality for the construction of machines, transportation equipment, ships, and steam boilers. It also produces all types

- 3 -

CONFIDENTIAL

50X1-HUM

CONFIDENTIAL

of steel used for concrete reinforcement, including high alloy chromium steel as well as plain carbon steel. The ironworks produces structural shapes, rolled wire, steel ribbon, plates and sheets, tubes, wire, nails, and electrodes.(4)

Smerčerevo is building a new rolling mill for sheet metal.

A large ironworks is under construction in Niksic.(1)

The Gustanj Ironworks produces automobile parts and tools.

The Store Ironworks produces iron castings.(5)

In the first phase of development of metallurgical plants, construction work is to be completed by the end of 1952 and installations by the end of 1953. Yugoslavia will then have the capacity to produce 1.5 million tons of iron ore, 540,000 tons of pig iron, 800,000 tons of ingot steel, and 600,000 tons of finished rolled, forged, and cast products.

New mines are being opened to keep pace with new blast furnaces being installed. The maximum capacity of iron ore mines in the final stage will be 2,350,000 tons per year.

By the end of 1952, seven new Siemens-Martin furnaces will be in operation, with a production capacity of 250,000 tons of steel. The production of electric steel, which constitutes 3 percent of Yugoslavia's total ingot steel production, will be increased to 6.5 percent during 1952. Some new high-frequency furnaces, especially adapted to the production of steel for tools and for the smelting of steel scrap, will be put into operation at the same time.

When all enterprises under construction are completed, Yugoslavia will produce annually 2,350,000 tons of iron ore, 760,000 tons of pig iron, 1,050,000 tons of ingot steel, and 730,000-740,000 tons of rolled, forged, and cast products.(7)

With the completion of ferrous metallurgical plants called for by the social plan, Yugoslav metallurgical production will be distributed as follows: railroad rails and equipment, 7.5 percent; heavy structural shapes, 10.7 percent; medium and light structural shapes and rolled wire, 51 percent; seamless and seamed pipe, 6.7 percent; metal plates, 6.4 percent; sheets and strips, 13.8 percent; castings, 1.9 percent; and other products, 2 percent.(2)

Yugoslavia will have a definite lack of plates, sheets, and rolled strips. Yugoslavia's well developed ship-construction industry, fish-canning industry, food and chemical packing industries, and plants producing industrial products for consumer consumption, such as frigidaires, furniture, and household and kitchen equipment, will make extensive use of sheets and tin plate.

In the near future, it will be necessary to expand the production of plates, and to master the production of high-quality, alloy-steel and stainless-steel sheets.(5)

Major progress has been made in Yugoslavia in the production of high-quality steels. The Gustanj and Store mills produce about 60 kinds of special high-speed, high-carbon, and other steels, which were formerly imported. The Sibenik and Jajce plants produce ferrous alloys, while ferrochromium is produced in Ruse. The steel industry is furnished cheap electric power by the hydroelectric power plants on the Drava, Krka, and Pliva rivers.(1)

- 4 -

CONFIDENTIAL

50X1-HUM

CONFIDENTIALMetallurgical Production

The following table shows the annual production of iron ores and ores used in ferrous metallurgy for 1939, and 1946 - 1952; the average monthly production in January - June, 1953, is also given (tons):

	<u>Iron Ore</u>	<u>Bauxite</u>	<u>Chromium</u>	<u>Pyrites</u>	<u>Pyrite Concentrates</u>	<u>Manganese</u>
1939	666,813	718,594	44,852	127,991	78,064	5,656
1946	394,593	55,219	93,696	48,594	94,141	7,514
1947	732,715	87,629	75,754	75,703	175,859	12,748
1948	864,455	136,476	62,613	90,718	209,288	12,795
1949	824,913	345,953	109,120	72,742	172,033	13,837
1950	825,856	200,892	114,736	30,935	86,232	13,338
1951	581,352	453,357	99,639	40,238	113,541	12,868
1952	676,010	577,196	107,222	20,732	167,397	12,687
1953 (Jan-Jun)*	57,306	38,527	10,840	308	13,739	1,053

* Average monthly production (tons)

The following table shows the production of ferrous metallurgical products (1,000 tons):

	<u>Pig Iron</u>	<u>Steel</u>	<u>Rolled Products</u>	<u>Drawn Products</u>	<u>Cast Products</u>
1939	101	235	151	2.5	0.4
1946	84	202	112	0.2	0.5
1947	162	311	191	8.2	0.6
1948	172	368	247	11.4	0.2
1949	190	401	250	13.2	1.2
1950	212	428	278	11.9	1.2
1951	248	434	301	13.6	2.0
1952	273	442	293	11.8	4.1
1953 (Jan-Jun)*	22,175	39,921	26,559	1,209	403 (8)

* Average monthly production (tons)

- 5 -

CONFIDENTIAL

Yugoslav Exports

Iron ore and ores used in ferrous metallurgy were exported in 1950 (10), 1951 (10), and 1952 (11) as follows (kilograms):

*[Should total 210,118,500.]

Italy	--	--	500,000
Trieste	--	--	13,138
Total	--	--	513,138

Austria	--	305,300	93,435
Belgium	--	47,200	--
West Germany	--	450,200	236,698
Finland	--	9,400	--
Switzerland	--	46,800	--
Great Britain	--	--	4,550
Total	482,800	858,900	334,683

Austria	--	929,800	154,633
Belgium	--	135,200	535,317

50X1-HUM

CONFIDENTIAL

	<u>1950</u>	<u>1951</u>	<u>1952</u>
<u>Ferrochromium</u>			
Great Britain	--	93,600	25,284
Italy	--	44,900	50,642
Luxembourg	--	80,600	--
West Germany	--	312,700	99,307
Netherlands	--	359,700	59,705
Trieste	--	149,900	--
Switzerland	--	45,200	411,923
Sweden	--	136,000	--
India	--	275,000	--
Union of South Africa	--	15,100	--
US	--	569,700	--
Argentina	--	109,800	--
Australia	--	--	379,115
Total	2,251,500	3,257,200	1,715,926
<u>Ferromanganese</u>			
West Germany	--	300,000	--
Switzerland	--	559,300	600,000
Austria	--	--	400,000
Belgium	--	--	234,000
Sweden	--	--	294,962
Egypt	--	--	30,000
US	--	--	800,000
Total	1,342,400	859,300	2,358,962
<u>Other Ferroalloys</u>			
Austria	--	20,000	20,000
Belgium	--	150,000	--
Total	--	170,000	20,000

- 7 -

CONFIDENTIAL

50X1-HUM

CONFIDENTIAL

	<u>1950</u>	<u>1951</u>	<u>1952</u>
<u>Pyrite Ore</u>			
Austria	--	3,348,600	5,134,760
West Germany	--	34,444,500	16,305,280
Total	55,101,300	37,793,100	21,440,040
<u>Pyrite Concentrate</u>			
Austria	--	--	3,141,000
Great Britain	--	--	10,134,600
Italy	--	--	536,640
West Germany	--	--	115,822,600
Netherlands	--	--	8,738,616
Total	--	--	138,373,456
<u>Pyrite Slag</u>			
West Germany	--	2,177,700	9,579,882
Italy	--	--	505,158
Total	5,949,200	2,177,700	10,085,040
<u>Chromium Ore</u>			
Austria	--	11,783,700	8,622,414
Italy	--	2,822,000	3,493,860
West Germany	--	8,829,100	6,570,585
Netherlands	--	280,000	594,042
Switzerland	--	200,000	--
US	--	11,477,400	10,370,912
Great Britain	--	--	4,010,444
Total	21,102,200	35,392,200	33,662,257
<u>Chromium Concentrate</u>			
Austria	--	425,500	--
Italy	--	800,000	620,000

- 8 -

CONFIDENTIAL

50X1-HUM

CONFIDENTIAL

	<u>1950</u>	<u>1951</u>	<u>1952</u>
<u>Chromium Concentrate</u>			
West Germany	--	6,000,000	5,060,092
US	--	10,331,600	8,867,396
Sweden	--	--	2,987,000
Total	19,211,300	17,557,100	17,534,488

<u>Bauxite</u>			
Austria	--	7,815,000	6,075,945
Italy	--	88,045,000	131,831,340
West Germany	--	352,644,300	474,809,109
Total	152,992,500	448,504,300	612,716,394

Yugoslav Imports

The following ores used in ferrous metallurgy and ferrous metallurgical products were imported in 1950 (10), 1951 (10), and 1952 (11) (kilograms):

Manganese Ore

Turkey	--	6,396,400	5,733,088
Sweden	--	20,000	--
India	--	2,705,900	1,056,688
Total	4,543,000	9,122,300	6,789,776

Manganese-Hausmannite

Sweden	--	10,000	--
--------	----	--------	----

Scrap Iron

Austria	--	10,200	--
West Germany	--	4,787,500	3,205,370
Turkey	--	6,319,200	2,980,494
Syria	--	2,054,300	3,060,300
Belgium	--	--	3,432,270
Great Britain	--	--	567,965

- 9 -

CONFIDENTIAL

50X1-HUM

CONFIDENTIAL

	<u>1950</u>	<u>1951</u>	<u>1952</u>
<u>Scrap Iron</u>			
Switzerland	--	--	1,032,100
Cyprus	--	--	372,985
Lebanon	--	--	102,000
PFV (French Government Aid)	--	--	6,867,170
Total	6,883,290	13,171,200	21,620,654
<u>Pig Iron</u>			
Austria	--	10,885,300	4,339,957
West Germany	--	--	2,355,740
Great Britain	--	101,600	--
Netherlands	--	500,000	500,500
Norway	--	100,000	99,300
France	--	2,000,000	--
PAV (US Government Aid)	--	7,115,000	7,600,220
PFV	--	--	3,030,000
Total	24,092,600	20,701,900	17,925,717
<u>Steel Bars</u>			
Austria	--	1,143,800	2,133,440
Italy	--	65,100	26,108
West Germany	--	196,800	27,994
Trieste	--	60,300	--
France	--	77,500	2,460,271
Belgium	--	--	1,324,270
Great Britain	--	--	49,363
PAV	--	501,000	371,420
Total	1,606,900	2,044,500	6,392,866
<u>Concrete Reinforcement Steel</u>			
Great Britain	--	2,073,600	449,456
Italy	--	1,910,000	--

- 10 -

CONFIDENTIAL

50X1-HUM

CONFIDENTIAL

	<u>1950</u>	<u>1951</u>	<u>1952</u>
West Germany	--	2,325,600	542,800
Belgium	--	--	5,759,505
France	--	--	1,646,280
PAV	--	--	1,944,835
Total	25,708,200	6,309,200	10,342,876

Steel Structural Shapes

Austria	--	698,200	126,403
Great Britain	--	294,100	862,333
Italy	--	212,000	304,761
West Germany	--	85,100	98,552
France	--	722,700	1,367,187
Belgium	--	--	98,825
Switzerland	--	--	1,127
PAV	--	--	544,866
Total	4,301,000	2,012,100	3,404,054

Supports

Austria	--	392,300	912,592
West Germany	--	110,800	870,474
Belgium	--	--	187,860
Italy	--	--	30,900
France	--	--	423,631
PAV	--	--	1,305,235
Total	1,687,600	503,100	3,730,692

Strip Steel

Austria	--	43,000	47,830
Belgium	--	--	343,140
West Germany	--	--	5,300
Trieste	--	--	4,999

- 11 -

CONFIDENTIAL

50X1-HUM

CONFIDENTIAL

	<u>1950</u>	<u>1951</u>	<u>1952</u>
<u>Strip Steel</u>			
France	--	--	1,181,754
PAV	--	57,400	4,296,165
Total	1,190,200	100,400	5,879,188
<u>Cold Rolled Strips</u>			
Austria	--	33,800	32,433
Great Britain	--	17,000	27,334
Italy	--	71,400	--
West Germany	--	422,300	125,742
Trieste	--	800	7,597
US	--	649,900	59,960
Belgium	--	--	29,355
France	--	--	120,286
Sweden	--	--	8,210
PAV	--	2,245,000	3,741,156
Total	2,969,200	3,440,200	4,152,073
<u>Railroad Rails and Fastenings</u>			
Belgium	--	101,100	4,809,660
Great Britain	--	174,400	--
West Germany	--	869,000	1,143,725
France	--	749,900	--
US	--	1,208,300	--
Total	29,725,400	3,102,700	5,953,385
<u>Switches</u>			
Austria	--	--	510
Total	38,400	--	510

- 12 -

CONFIDENTIAL

50X1-HUM

CONFIDENTIAL

	<u>1950</u>	<u>1951</u>	<u>1952</u>
<u>General Rolled Wire</u>			
Austria	--	433,800	421,176
Belgium	--	--	601,780
West Germany	--	--	113,809
France	--	--	199,850
PAV	--	208,200	3,230,493
PFV	--	--	123,380
Total	5,943,700	642,000	4,690,488
<u>Drawn Steel Wire</u>			
Austria	--	1,979,000	312,876
Belgium	--	280,400	--
Great Britain	--	5,800	--
West Germany	--	1,096,800	683,331
France	--	74,800	1,361,932
Switzerland	--	15,000	10,000
Sweden	--	10,000	6,138
US	--	805,200	--
Italy	--	--	2,032
PAV	--	611,700	4,120,992
PFV	--	--	1,585,203
Total	2,894,300	4,878,700	8,082,504
<u>Galvanized Steel Wire</u>			
Austria	--	42,900	347,060
West Germany	--	91,700	65,573
France	--	19,600	725,403
Switzerland	--	19,000	10,000
US	--	938,800	--
Belgium	--	--	8,344

- 13 -

CONFIDENTIAL

50X1-HUM

CONFIDENTIAL

	<u>1950</u>	<u>1951</u>	<u>1952</u>
<u>Galvanized Steel Wire</u>			
Italy	--	--	16,500
PAV	--	468,700	1,103,981
PFV	--	--	305,530
Total	1,282,100	1,580,700	2,582,391
<u>Heat-Resistant Steel Wire</u>			
Great Britain	--	3,400	40
West Germany	--	1,500	--
Austria	--	--	250
Italy	--	--	120
Sweden	--	--	347
PAV	--	--	272,925
Total	100	4,900	273,682
<u>Other Special Wire</u>			
Austria	--	72,200	99,748
Belgium	--	40,000	--
Great Britain	--	13,200	3,309
Italy	--	6,500	41,105
West Germany	--	41,900	48,597
Trieste	--	400	303
Switzerland	--	200	--
US	--	29,400	--
France	--	--	39,599
Sweden	--	--	3,595
PAV	--	108,600	278,300
PFV	--	--	71,206
Total	10,600	312,400	585,762

- 14 -

CONFIDENTIAL

50X1-HUM

CONFIDENTIAL

	<u>1950</u>	<u>1951</u>	<u>1952</u>
<u>Plates and Sheets, Uncoated</u>			
Austria	--	1,140,900	1,728,950
Great Britain	--	171,400	--
West Germany	--	578,000	299,995
Trieste	--	32,200	--
France	--	385,800	1,043,160
US	--	1,168,300	53,060
Belgium	--	--	1,487,680
Switzerland	--	--	100,420
PAV	--	2,639,200	3,132,457
Total	6,443,200	6,115,800	7,845,722
<u>Pickled Sheets</u>			
Austria	--	3,500	1,866
West Germany	--	903,200	449,625
Switzerland	--	100,400	20,370
Italy	--	--	19,220
PAV	--	1,599,100	4,624,782
Total	2,526,900	2,606,200	5,115,763*
* <u>Should total 5,115,863</u>			
<u>Special Steel Sheets</u>			
Austria	--	146,800	196,834
West Germany	--	24,100	129,351
Sweden	--	200	3,440
PAV	--	587,900	53,448
Total	30,900	759,000	383,073
<u>Stainless Steel Sheets</u>			
Austria	--	20,900	8,360
West Germany	--	500	--
PAV	--	--	90,414
Total	200,800	21,400	98,774

- 15 -

CONFIDENTIAL

50X1-HUM

CONFIDENTIAL

	<u>1950</u>	<u>1951</u>	<u>1952</u>
<u>Transformer Sheets</u>			
Great Britain	--	74,900	52,464
France	--	50,000	--
US	--	126,200	30,650
Belgium	--	--	194,990
West Germany	--	--	100,080
Switzerland	--	--	220,010
PAV	--	303,900	3,084,418
Total	106,850	555,000	3,682,612
<u>Heat-Resistant Plates</u>			
Austria	--	7,900	1,719
Total	16,900	7,900	1,719
<u>Ship and Boiler Plates</u>			
Austria	--	1,842,400	2,917,780
Great Britain	--	2,318,200	768,159
Italy	--	179,100	--
West Germany	--	174,300	244,880
France	--	599,400	1,340,360
Belgium	--	--	603,630
Total	14,824,100	5,113,400	5,874,809
<u>Tin Plate</u>			
Great Britain	--	290,300	1,113,605
US	--	592,400	--
West Germany	--	--	216,808
PAV	--	1,774,900	2,052,550
Total	2,372,900	2,557,600	3,382,963

- 16 -

CONFIDENTIAL

CONFIDENTIAL

50X1-HUM

	<u>1950</u>	<u>1951</u>	<u>1952</u>
<u>Other Coated Sheets and Plates</u>			
Austria	--	45,000	6,440
Italy	--	1,300	--
Switzerland	--	100	--
US	--	118,300	--
West Germany	--	--	14,225
PAV	--	299,100	1,534,826
Total	87,400	463,800	1,555,491
<u>Seamless Tubes</u>			
Austria	--	58,400	631,804
Belgium	--	523,500	430,529
Great Britain	--	319,500	103,160
Italy	--	1,260,100	2,598,010
West Germany	--	713,700	2,590,303
Trieste	--	3,800	37,782
Switzerland	--	2,700	23,000
Sweden	--	64,700	70,019
US	--	361,000	184,218
Netherlands	--	--	16,350
France	--	--	37,860
PAV	--	1,324,200	1,502,797
Total	4,098,500	4,631,600	8,225,832
<u>Welded Tubes</u>			
Great Britain	--	180,000	--
Italy	--	26,200	76,677
West Germany	--	55,300	76,048
Austria	--	--	2,795
France	--	--	45,349

- 17 -

CONFIDENTIAL

50X1-HUM

CONFIDENTIAL

	<u>1950</u>	<u>1951</u>	<u>1952</u>
<u>Welded Tubes</u>			
PAV	--	--	602,853
Total	455,300	261,500	803,722
<u>Cast Iron Tubes</u>			
Belgium	--	302,800	209,156
Great Britain	--	689,800	794,888
Italy	--	898,900	17,225
West Germany	--	11,400	230,001
France	--	1,475,500	2,428,713
US	--	275,000	--
Austria	--	--	249,376
PAV	--	83,600	107,571
Total	1,932,800	3,737,000	4,036,930
<u>Pipes for Deep Drilling</u>			
Belgium	--	191,900	49,287
Italy	--	2,056,300	1,514,980
West Germany	--	490,000	14,456
US	--	691,900	--
Sweden	--	--	40,421
PAV	--	--	73,271
Total	1,832,200	3,430,100	1,692,415
<u>Other Tubes</u>			
Austria	--	1,100	54,751
Italy	--	167,500	47,924
West Germany	--	17,700	404,914
Sweden	--	66,100	57
US	--	1,000	--
Belgium	--	--	21,048

- 18 -

CONFIDENTIAL

50X1-HUM

CONFIDENTIAL

	<u>1950</u>	<u>1951</u>	<u>1952</u>
<u>Other Tubes</u>			
Trieste	--	--	2,400
France	--	--	45,543
Switzerland	--	--	4,200
PAV	--	--	73,271
Total	989,700	255,400	828,307*

*Should total 654,1087

Low-Alloy Construction Steel

Austria	--	1,669,900	1,741,571
Belgium	--	2,400	--
Great Britain	--	120,000	7,723
Italy	--	1,224,300	3,318
West Germany	--	19,400	118,143
Sweden	--	49,800	45,725
Trieste	--	--	916
PAV	--	--	419,411
Total	10,950,900	3,085,800	2,336,807

High-Alloy Construction Steel

Austria	--	271,500	672,795
Great Britain	--	229,900	1,249
Italy	--	300	--
West Germany	--	61,700	99,258
Sweden	--	2,900	66,141
Belgium	--	--	5,100
Trieste	--	--	163
Switzerland	--	--	158
PAV	--	--	295,063
Total	2,363,000	566,300	1,139,927

- 19 -

CONFIDENTIAL

50X1-HUM

CONFIDENTIAL

	<u>1950</u>	<u>1951</u>	<u>1952</u>
<u>Special High-Alloy Steel</u>			
Austria	--	74,300	135,791
Great Britain	--	65,500	42,226
Italy	--	600	8,100
West Germany	--	--	21,707
Trieste	--	[Less than 100 kg]	131
Switzerland	--	[Less than 100 kg]	36
Sweden	--	14,700	39,108
PAV	--	--	149,706
Total	608,400	155,100	466,805
<u>Hard Metals</u>			
Austria	--	2,800	3,628
Great Britain	--	100	184
Italy	--	[Less than 100 kg]	--
West Germany	--	100	1,002
Netherlands	--	200	--
Switzerland	--	[Less than 100 kg]	64
Sweden	--	500	192
Total	2,700	3,700	5,070
<u>Ingots, Billets, etc.</u>			
Austria	--	--	39,939
PAV	--	--	2,596,722
Total	--	--	2,636,661
<u>Steel Powder</u>			
West Germany	--	--	24,280
Total	--	--	24,280

- 20 -

CONFIDENTIAL

50X1-HUM

CONFIDENTIAL

	<u>1950</u>	<u>1951</u>	<u>1952</u>
<u>Chromium and Chromium Products</u>			
[Country not specified]	200	--	--
Trieste	--	--	27
Total	200	--	27
<u>Nickel and Nickel Products</u>			
Austria	--	100	17
Great Britain	--	30,700	53,188
West Germany	--	100	332
Norway	--	5,000	--
Trieste	--	--	8
France	--	--	8
PAV	--	--	13,208
Total	11,600	35,900	66,671
<u>Molybdenum</u>			
Austria	--	--	70
Great Britain	--	--	23
Total	--	--	93
<u>Steel Castings</u>			
Austria	--	281,300	641,447
Belgium	--	27,200	50,189
Italy	--	135,300	67,111
West Germany	--	405,500	318,251
Netherlands	--	2,600	--
Great Britain	--	--	28,839
France	--	--	21,584
PAV	--	--	2,187
Total	1,664,800	851,900	1,129,608

- 21 -

CONFIDENTIAL

50X1-HUM

CONFIDENTIAL

	<u>1950</u>	<u>1951</u>	<u>1952</u>
<u>Cast Iron Castings</u>			
Austria	--	--	27,455
Belgium	--	--	9,774
Italy	--	--	816
West Germany	--	--	12,592
Total	636,400	--	50,637
<u>Steel Forgings, Stampings, and Pressings</u>			
Austria	--	189,500	507,159
Great Britain	--	6,900	7,753
Italy	--	24,200	540
West Germany	--	48,500	226,676
Total	189,000	269,100	742,168
<u>Steel Constructions</u>			
Belgium	--	304,600	--
Italy	--	9,600	--
West Germany	--	381,800	253,308
France	--	110,700	48,949
Total	369,100	806,700	302,257
<u>Ferrotungsten</u>			
Great Britain	--	30,400	--
US	--	28,400	--
Sweden	--	--	9,827
Japan	--	--	13,959
PAV	--	--	25,837
Total	92,400	58,800	49,623
<u>Ferrochromium</u>			
West Germany	--	--	198
Total	--	--	198

- 22 -

CONFIDENTIAL

CONFIDENTIAL

50X1-HUM

	<u>1950</u>	<u>1951</u>	<u>1952</u>
<u>Ferrovanadium</u>			
Great Britain	--	11,800	--
Sweden	--	5,000	--
PAV	--	--	2,722
Total	8,000	16,800	2,722
<u>Ferromanganese</u>			
France	--	40,000	20,000
Great Britain	--	--	10,160
Total	--	40,000	30,160
<u>Ferromolybdenum</u>			
US	--	--	3,851
PAV	--	--	14,325
Total	--	--	18,176
<u>Ferrophosphorus</u>			
US	--	70,000	35,000
Total	83,700	70,000	35,000
<u>Other Ferroalloys</u>			
Austria	--	700	--
Great Britain	--	22,300	10,500
West Germany	--	--	20
Total	25,700	23,000	10,520

SOURCES

1. Ekonomska geografija Jugoslavije (Economic Geography of Yugoslavia), Nikola K. Dragicovic, Belgrade, 1952
2. Geografija Jugoslavije (Geography of Yugoslavia), Dr Rude Petrovic, Zagreb, 1952
3. Ekonomska politika, Belgrade, 21 May 53
4. Yugoslavia Export-Import Katalog, Belgrade, 1953

- 23 -

CONFIDENTIAL

CONFIDENTIAL

50X1-HUM

5. Katalog Zagrebackog velesajma (Catalog of the Zagreb Fair), Zagreb, 15 - 30 Sep 51
6. Kalendar narodne armije (Calendar of the People's Army), Belgrade, 1953
7. Questions Actuelles du Socialisme, Paris, Jun - Jul 52
8. Indeks, mesecni pregled privredne statistike FNR Jugoslavije (Index, Monthly Survey of the Economic Statistics of Yugoslavia), Belgrade, Aug 53
9. Sluzbeni list FNRJ (Official Gazette of Yugoslavia), Belgrade, 4 Mar 53
10. Statistika spoljne trgovine FNR Jugoslavije za 1951 godinu (Statistics of Yugoslav Foreign Trade in 1951), Belgrade, 1952
11. Statistika spoljne trgovine FNR Jugoslavije za 1952 godinu (Statistics of Yugoslav Foreign Trade for 1952), Belgrade, 1953

- E N D -

50X1-HUM

CONFIDENTIAL

50X1-HUM

Page Denied